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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/204,888	12/03/1998	CHARLES A. ELDERING	8887.3002	9427

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EXPANSE NETWORKS, INC.  
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[REDACTED] EXAMINER

PHAM, ROBERT T

ART UNIT	PAPER NUMBER
2611	8

DATE MAILED: 07/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/204,888	ELDERING ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Robert T Pham	2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_ .
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 20-77 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 20-77 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_ .  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)      4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_ .  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) Notice of Informal Patent Application (PTO-152)  
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,5,7.      6) Other:

## DETAILED ACTION

1. All US documents referred to in IDS received on August 3, 2001, April 24, 2000, and December 3, 1998 were considered. All non-US documents referred to in IDS received on August 3, 2001 were not provided and therefore were not considered as per 37 CFR 1.97.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 20, 22-29, 32-36, 39-61, 63-77 are rejected under 35 U.S.C. 102(b) as being anticipated by Alexander, U.S. Patent 6,177,931.

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Regarding claim 20, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein:

Monitoring user viewing activities and collecting subscriber selection data based on source material selected by the user over a predetermined period of time is described in column 28, lines 30-67;

Processing the subscriber selection data to create a subscriber profile is described in column 30, lines 1-6.

Regarding claims 22, 57, 68, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein monitoring volume control commands is described in column 28, lines 46-49;

Regarding claims 23-25, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein monitoring program selection commands including channel change signals and address request is described in column 28, lines 32-38 and column 8, lines 22-27;

Regarding claim 26, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein monitoring record signals is described in column 28, lines 44-46

Regarding claims 27-29, 63, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein:

Extracting source related text from the source material;

Source related text includes one or more descriptive fields;

Source material is an EPG and source related text is extracted from EPG;

is described in column 8, lines 49-57, wherein the user can obtain the addresses of the EPG internet web sites.

Regarding claims 32, 56, 67, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein monitoring time durations which corresponds to viewing times of selected source material is described in column 29, lines 37-55.

Regarding claims 33-35, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein generating one or more program characteristics vectors based on the subscriber selection data is described in column 29, lines 43-46 (N-dimensional matrix consists of sports, comedy, science fiction, cooking, travel, etc.; and within sports, there are golf, tennis, football, etc.)

Regarding claim 36, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein processing subscriber selection data is based on a pre-determined set of heuristic rules is described in column 29, lines 56-67, and column 30, lines 1-6.

Regarding claim 39, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the subscriber profile is based on user interests is described in column 29, lines 56-67.

Regarding claim 40, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the

subscriber belongs to a household and the subscriber profile is based on interests of the household is described in column 28, lines 26-29.

Regarding claim 41, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the subscriber profile is a demographic profile indicating the probable age, income, gender, and other demographics of the user is described in column 30, lines 29-32.

Regarding claims 42, 64, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the predetermined period of time for collecting subscriber selection data is a viewing session is described in column 29, lines 37-50, and the subscriber profile is a demographic profile for the user during the viewing session is provided by a combination of parental control function as described in column 17, lines 27-36, and PIN or individualized remote control as described in column 28, lines 24-26.

Regarding claims 43, 65, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the predetermined period of time for collecting subscriber selection data is a plurality of viewing session is described in column 29, lines 50-55, and the subscriber profile is a demographic profile for the user during the viewing session is provided by a combination of parental control function as described in column 17, lines 27-36, and PIN or individualized remote control as described in column 28, lines 24-26.

Regarding claim 44, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the

subscriber profile is a program preference profile indicating the type of programming of interest to the user is described in column 29, lines 56-67.

Regarding claim 45, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the subscriber profile is a product preference profile for the user is described in column 30, lines 21, 34-37.

Regarding claims 46, 58, 69, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the subscriber belongs to a household and the subscriber profile includes probabilistic measurements of household demographics is described in column 28, lines 26-29, and column 30, lines 29-32.

Regarding claims 47, 59, 70, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the subscriber belongs to a household and the subscriber profile includes probabilistic measurements of household program interests is described in column 28, lines 26-29, and column 29, lines 56-67.

Regarding claims 48, 60, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the subscriber belongs to a household and the subscriber profile includes probabilistic measurements of household product interests is described in column 28, lines 26-29, and column 30, lines 21, 34-37.

Regarding claims 49, 72, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the predetermined period of time for collecting subscriber selection data is a viewing session, and the subscriber profile is a demographic profile for the household during the viewing session is described in column 28, lines 26-29, and column 29, lines 37-50.

Regarding claims 50, 73, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the predetermined period of time for collecting subscriber selection data is a plurality of viewing session, and the subscriber profile is an average demographic profile for the household during the viewing session is described in column 28, lines 26-29, and column 29, lines 50-55.

Regarding claim 51, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the subscriber profile is controlled by the user is described in column 28, lines 24-25, and column 30, lines 51-53.

Regarding claims 52-53, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the subscriber profile is analyzed by a third party for the purpose of marketing and advertising; and access to the subscriber profile is limited to a select number of other parties is described in column 32, lines 22-27, and column 33, lines 9-15.

Regarding claim 54, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein

analyzing the subscriber profile is used to estimate user viewing habits is described in column 29, lines 50-55, and column 30, lines 51-53.

Regarding claim 55, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein:

A means for processing data is described in column 29, lines 50-55 (the profile analysis program);

A storage medium is described in column 5, line 24;

Means for monitoring subscriber activity including means for storing subscriber selection data is described in column 28, lines 30-67;

Means for retrieving source related information is described in column 9, lines 64-67, and column 10, lines 1-2;

Means for processing the subscriber selection data to generate the subscriber profile is described in column 29, lines 37-55;

Means for storing subscriber profile is described in column 28, lines 30-67.

Regarding claim 61, Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein means for retrieving source related information includes means for context mining of textual information associated with the selected source material is described in column 31, lines 48-52.

Regarding claim 66, Alexander discloses an apparatus and method for generating subscriber profile vector for a subscriber user of TV programming, wherein:

A means for processing data is described in column 29, lines 50-55 (the profile analysis program);

A storage medium is described in column 5, line 24;

Means for monitoring subscriber activity including means for storing subscriber selection data is described in column 28, lines 30-67;

Means for retrieving source related information is described in column 9, lines 64-67, and column 10, lines 1-2;

Means for generating program characteristics vectors based on the source related information is described in column 29, lines 43-46 (N-dimensional matrix consists of sports, comedy, science fiction, cooking, travel, etc.; and within sports, there are golf, tennis, football, etc.);

Means for storing a set of heuristic rules, and means for processing the subscriber selection data with respect to program characteristics vector and the set of heuristic rules to generate the subscriber profile vector is described in column 29, lines 56-67, and column 30, lines 1-6;

Means for storing subscriber profile vector is described in column 28, lines 30-67.

Regarding claim 71, Alexander discloses an apparatus and method for generating household demographics vector, wherein:

A means for processing data is described in column 29, lines 50-55 (the profile analysis program);

A storage medium is described in column 5, line 24;

Means for monitoring subscriber activity including means for storing subscriber selection data is described in column 28, lines 30-67;

Means for generating household viewing habits from subscriber selection data, means for storing a set of heuristic rules, and means for processing the subscriber selection data with respect to the set of heuristic rules to generate the household demographic characteristics vector is provided by a combination of parental control function as described in column 17, lines 27-36, and PIN or individualized remote control as described in column 28, lines 24-26. The above information is combined with information about selection data and processing rules, described in column 28, 30-67, column 29, lines 56-67, and column 30, lines 1-6, 29-37 to generate household demographic characteristics vector;

Means for storing household demographic characteristics vector is described in column 28, lines 30-67.

Regarding claim 74, Alexander discloses an apparatus and method for interactive TV system, wherein:

An input device for allowing a subscriber to select source material to view is described in column 5, lines 25-26;

A monitor for displaying the selected source material is described in column 5, lines 40-42;

A profile generator is described in column 29, lines 56-67, and column 30, lines 1-6.

Regarding claims 75-77, Alexander discloses an apparatus and method as claimed, wherein:

Means for monitoring subscriber activity is described in column 28, lines 30-67;

Means for retrieving source related information corresponding to the selected source material is described in column 9, lines 64-67, and column 10, lines 1-2;

Means for generating a subscriber profile based on the subscriber activity and the source related information is described in column 29, lines 56-67, and column 30, lines 1-6;

Means for generating content characteristics vector based on source related information is described in column 29, lines 43-46 (N-dimensional matrix consists of sports, comedy, science fiction, cooking, travel, etc.; and within sports, there are golf, tennis, football, etc.);

Means for generating a subscriber profile based on the subscriber activity, content characteristics vector, and a set of heuristic rules is described in column 29, lines 56-67, and column 30, lines 1-6;

Means for generating viewing habits profile and means for generating a subscriber profile based on the viewing habits profile and a set of heuristic rules is described in column 29, lines 56-67, and column 30, lines 1-6.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander. Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the source materials are TV programs watched, and EPG supplemental information downloaded from the internet, as described in column 29, lines 37-50, and column 8, lines 19-27.

Alexander does not disclose source material includes analog video, MPEG, digital video, and HTML.

Official Notice is taken that it is extremely well known in the art that TV program source comprises analog video, MPEG, and digital video, and EPG supplemental information from the internet are HTML web pages. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alexander to include analog video, MPEG, digital video and HTML source materials to offer viewers a wide variety of selection to enhance their viewing experience.

6. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander, in view of Maa U.S. Patent 5,818,935.

Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, as claimed.

Alexander does not disclose the source material is an HTML file related to the source material and the source related text is extracted from the HTML file.

Maa discloses an internet enhanced video system, wherein TV-guide is provided in the form of HTML pages containing URLs of internet web sites, as described in column 19, lines 47-67, and column 20, lines 1-7.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alexander to include HTML-based EPG, as disclosed by Maa, to enhance viewers' viewing experience by enabling viewers to access supplemental information about the program being viewed on the internet.

7. Claims 31, 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander, in view of Hidary U.S. Patent 5,774,664.

Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, as claimed.

Alexander does not disclose the source material includes close captioning information and the source related text is extracted from the close captioning information.

Hidary discloses an enhanced video programming system, wherein URLs are encoded into the close captioning at the transmit end and extracted from the close captioning at the receive end, as described in column 4, lines 44-50, and column 5, lines 25-33.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alexander to include URLs in close captioning, as disclosed by Hidary, to enhance viewers' viewing experience by enabling viewers to access supplemental information about the program being viewed on the internet.

8. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander, in view of Herz U.S. Patent 6,088,722.

Alexander discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, as claimed.

Alexander does not disclose the heuristic rules include logical forms and conditional probabilities.

Herz discloses an apparatus and method for generating subscriber profile for a subscriber user of TV programming, wherein the heuristic rules include logical forms and conditional probabilities as described in column 12, lines 34-58.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alexander to include heuristic rules with logical forms and conditional probabilities, as disclosed by Herz, to arrive at a more accurate subscriber profile.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Ivanyi U.S. Patent 6,286,140 discloses system and method for measuring and storing information pertaining to television viewer or user behavior.

Lu U.S. Patent 5,550,928 discloses an audience measurement system and method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert T Pham whose telephone number is 703-305-4810. The examiner can normally be reached on M-F 7:30-5; every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9700.

Robert Pham  
July 12, 2002

  
ANDREW FAILE  
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